

Intellectual Property Office of Singapore

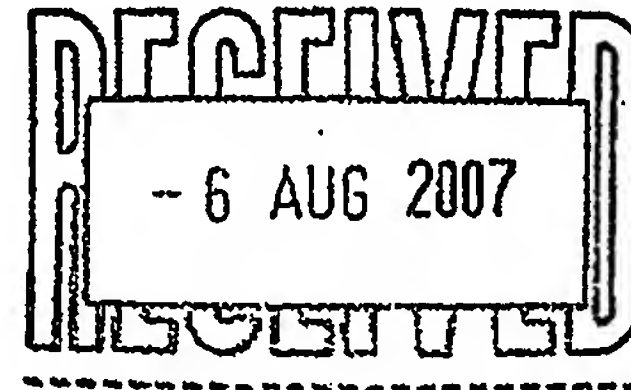
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RF 240

In Reply Please Quote Our Reference

Your Ref : LPN/LWC/NJ/K.2006004814
Our Ref : 2006036792/070802/TMMHO/9737
Date : 02/08/2007
Writer's Direct Line : 63302748

ALLEN & GLEDHILL
#28-00
ONE MARINA BOULEVARD
SINGAPORE 018989



Dear Sir,

Singapore Patent Application No.: 200603679-2

Title of invention: EXPOSURE APPARATUS, EXPOSURE METHOD, DEVICE PRODUCING
METHOD, AND OPTICAL COMPONENT

Applicant(s): NIKON CORPORATION (JP)

INVITATION TO RESPOND TO WRITTEN OPINION

We forward with this letter a copy of the Search Report and Written Opinion drawn up by the Examiner in connection with your request for a Search and Examination Report.

You are invited to respond to the opinion by submitting:

- (a) Written submissions or arguments disagreeing with the Examiner's opinion and/or
- (b) An amendment of the specification of the application.

If you intend to respond, the response must be filed within 5 months from the date of this letter. You are also advised to inform us early if you do not intend to respond.

The Examiner will proceed to establish the Examination Report if no response is received by the end of the prescribed period.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully,

Muhammad Haramain Osman
for REGISTRAR OF PATENTS
SINGAPORE

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Applicant's or agent's file reference. LPN/LWC/NJ/K.2006004814			
Application No. SG 200603679-2	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Application Filing Date (<i>day/month/year</i>) 3 December 2004</td> <td style="width: 50%; padding: 5px;">(Earliest) Priority Date (<i>day/month/year</i>) 3 December 2003</td> </tr> </table>	Application Filing Date (<i>day/month/year</i>) 3 December 2004	(Earliest) Priority Date (<i>day/month/year</i>) 3 December 2003
Application Filing Date (<i>day/month/year</i>) 3 December 2004	(Earliest) Priority Date (<i>day/month/year</i>) 3 December 2003		
Applicant NIKON CORPORATION.(JP)			

This search report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I)
2. ☒ Unity of invention is lacking (See Box II)
3. ☐ The application contains disclosure of a nucleotide and/or amino acid sequence listing and the search was carried out on the basis of the sequence listing
 - ☐ filed with the application
 - ☐ furnished by the applicant separately from the application,
 - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in application as filed
4. With regard to the title,
 - ☒ the text is approved as submitted by the applicant.
 - ☐ the text has been established by this Office to read as follows:
- With regard to the abstract,
 - ☒ the text is approved as submitted by the applicant
 - ☐ the text has been established by this Office as it appears in Box III
6. The figure of the drawings to be published with the abstract is Figure No. 7
 - ☒ as suggested by the applicant.
 - ☐ because the applicant failed to suggest a figure
 - ☐ because this figure better characterises the invention
 - ☐ None of the figures

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Application No.

SG 200603679-2

A. CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC)

Int. Cl.

H01L 21/027 (2006.01) G02B 1/10 (2006.01) G03F 7/20 (2006.01)

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Search Results of corresponding PCT Application no.PCT/JP2004/018435 have been considered.

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	JP 2004-207711 A (NIKON CORP.) 22 July 2004 Abstract & paragraphs 0036-0038 See machine translation: [online], [retrieved on 2007-06-15]. Retrieved from the Internet: http://www4.ipdl.inpit.go.jp/Tokujitu/PAJdetail.ipdl?N0000=60&N0120=01&N2001=2&N3001=2004-207711	1-51
X	US 2003/0139620 A1 (YAMAGUCHI ET AL.) 24 July 2003 paragraphs 0056, 0069, 0078 & 0083	52-56



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
" " document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of submission of the request to the Australian Patent Office

25 May 2007

Date of completion of the search report

20 June 2007

Date of mailing of the search report

28 JUN 2007

Name and mailing address

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Authorised officer

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AUSTRALIAN PATENT OFFICE
SEARCH REPORT

Application No.
SG 200603679-2

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>JP 10-303114 A (NIKON CORP.) 13 November 1998</p> <p>Abstract & paragraphs 0010, 0017</p> <p>See machine translation: [online], [retrieved on 2007-06-15]. Retrieved from the Internet:</p> <p><u>http://www4.ipdl.inpit.go.jp/Tokujitu/PAJdetail.ipdl?N0000=60&N0120=01&N2001=2&N3001=H10-303114</u></p>	1-51
A	<p>JP 11-176727 A (NIKON CORP.) 02 JULY 1999</p> <p>Abstract & paragraphs 0008, 0012</p> <p>See machine translation: [online], [retrieved on 2007-06-15]. Retrieved from the Internet:</p> <p><u>http://www4.ipdl.inpit.go.jp/Tokujitu/PAJdetail.ipdl?N0000=60&N0120=01&N2001=2&N3001=H11-176727</u></p>	1-51

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

PATENT FAMILY MEMBERS

Application No.

SG 200603679-2

Patent Document Cited in Search Report		Patent Family Member			
JP	2004207711	AU	2003289271	CN	1723539
		KR	2005008406	US	2005237504
		US	2006132736	US	2006274294
		WO	2004053956	EP	1571698
US	2003139620	EP	1300433	US	2006098178
		US	7196212	US	2007035710
JP	10303114	JP	2003238577	KR	2003002949
JP	11176727				
<p>Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.</p> <p>END OF ANNEX</p>					

AUSTRALIAN PATENT OFFICE
SEARCH REPORT

Application No.
SG 200603679-2

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This search report has not been established in respect of certain claims for the following reasons:

1. ☐ Claims Nos.
because they relate to non-patentable subject matter (sections 13 and 16) not required to be searched by this Office, namely:

2. ☐ Claims Nos.
because they relate to parts of the application that does not comply with the prescribed requirements (sections 25(4) and 25(5)) to such an extent that no meaningful search can be carried out, specifically:

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This Office found multiple inventions in this application, as follows:

The application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single inventive concept. In coming to this conclusion this Office has found there are two inventions:

1. Claims 1-51 are directed to a liquid immersion exposure device for transferring a pattern onto the substrate by using a projection optical system. It is considered that the liquid immersion exposure for a substrate comprises a first "special technical feature".
2. Claims 52-56 are directed to the structure of an optical part. It is considered that the optical part comprises a second separate "special technical feature".

Since the abovementioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, does not exist. Accordingly, the application does not relate to one invention or to a single inventive concept. Since, the search for the second invention was done with a negligible additional effort over that for the first one; all claims 1-56 were examined in establishing this report.

- ☐ Accordingly, this Office is reporting only on the main invention of claims , or
- ☒ Since little extra effort was involved, this Office is reporting on the inventions of claims 1-56 .